

**Environmental Baseline Survey for
Public Private Venture
Various Marine Corps Base Hawaii
Housing Support Facilities:
Kaneohe and Pearl City Annex
OAHU, HAWAII**

August 2006

**Department of the Navy
Commander, Pacific Division
Naval Facilities Engineering Command
Pearl Harbor, HI 96860-3134**



Contract Number N62742-04-D-1859, CTO 0015

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Pesticides/Herbicides: Buildings 460, 455 and PCA Warehouse 71 were constructed prior to the distribution and commercial application of chlordane in 1948. Chlordane was known to have been applied beneath and around building foundations at MCBH Kaneohe for termite protection until the ban on its use in 1988. The presence of the pesticide residues in the soil is the result of past application of the chemicals on site rather than the result of a spill or other type of release. Legal applications do not require remediation (Category 1); however, future construction that may disturb such soils may require environmental, as well as safety and health, controls.

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3.4 FINDINGS OF CONCERN

3.4.1 On-Site Findings Requiring Notification

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Pesticides/Herbicides – Building 460 was constructed prior to the distribution and commercial application of chlordane in 1948. However, chlordane was known to have been applied on MCBH around building foundations for termite protection after construction. According to housing management, pesticides have been occasionally applied around the building to control ant, rodent, and bird infestation (personal communication, Mr. John Padeken 2006). Prior sampling also confirms that pesticides/herbicides are present in soils at various locations within MCBH housing areas (Kauai Environmental and White Environmental 2006). The presence of the pesticide residues in the soil is the result of past application of the chemicals on site rather than the result of a spill or other type of release (DoN 2003a). This finding is an area of concern for the Subject Property.

**Table 3-1.
On-Site Findings
Building 460, MCBH Kaneohe**

Environmental Condition	Site	Finding of Concern (ECP)	Description
Pesticides / Herbicides	Building 460	Yes	Building 460 was constructed prior to the distribution and commercial application of chlordane in 1948. However, chlordane was known to have been applied on MCBH around building foundations for termite protection after construction. According to housing management, pesticides have been occasionally applied around the building to control ant, rodent, and bird infestation. Prior sampling also confirms that pesticides/herbicides are present in soils at various locations within MCBH housing areas. The presence of the pesticide residues in the soil is the result of past application of the chemicals on site rather than the result of a spill or other type of release.
[REDACTED]	[REDACTED]	[REDACTED]	(b) (5) [REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Notes: ECP – Environmental Condition of Property

**Table 4-1.
On-Site Findings
Building 455, MCBH Kaneohe**

Environmental Condition	Site	Finding of Concern (ECP)	Description
Pesticides / Herbicides	Building 455	Yes	Building 460 was constructed prior to the distribution and commercial application of chlordane in 1948. However, chlordane was known to have been applied on MCBH around building foundations for termite protection after construction. According to housing management, pesticides have been occasionally applied around the building to control ant, rodent, and bird infestation. Prior sampling also confirms that pesticides/herbicides are present in soils at various locations within MCBH housing areas. The presence of the pesticide residues in the soil is the result of past application of the chemicals on site rather than the result of a spill or other type of release.
[REDACTED]	[REDACTED]	[REDACTED]	(b) (5) [REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Notes: ECP – Environmental Condition of Property

**Table 5-1.
On-Site Findings
Building 4005, MCBH Kaneohe**

Environmental Condition	Site	Finding of Concern (ECP)	Description
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Pesticides / Herbicides	Building 4005	Yes	Chlordane was known to have been applied beneath and around building foundations at MCBH Kaneohe for termite protection until the ban on its use in 1988. Based on the construction date, surface soil beneath the floor slab of Building 4005 is assumed to potentially contain chlordane. According to housing personnel, pesticides have also been occasionally applied around the building for control of pest infestation. Prior sampling confirms that pesticides/herbicides are present in soils at various locations within MCBH housing areas. The presence of the pesticide residues in the soil is the result of past application of the chemicals on site rather than the result of a spill or other type of release.
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Notes: ECP – Environmental Condition of Property

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6.4 FINDINGS OF CONCERN

6.4.1 On-Site Findings Requiring Notification

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Pesticides/Herbicides – Chlordane was known to have been applied beneath and around building foundations at MCBH Kaneohe for termite protection until the ban on its use in 1988. Based on the construction date, surface soil beneath the floor slab of Building 1197 is assumed to potentially contain chlordane. According to housing personnel, pesticides have also been occasionally applied around the building for control of pest infestation (personal communication, Mr. James Griffen 2006). Prior sampling confirms that pesticides/herbicides are present in soils at various locations within MCBH housing areas (Kauai Environmental and White Environmental 2006). The presence of the pesticide residues in the soil is the result of past application of the chemicals on site rather than the result of a spill or other type of release (DoN 2003a). This finding is an area of concern for the Subject Property.

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**Table 6-1.
On-Site Findings
Building 1197, MCBH Kaneohe**

Environmental Condition	Site	Finding of Concern (ECP)	Description
Pesticides / Herbicides	Building 1197	Yes	Based on the construction date, surface soil beneath the floor slab of Building 1197 is assumed to potentially contain chlordane. Pesticides have also been occasionally applied around the building for control of pest infestation. Prior sampling confirms that pesticides/herbicides are present in soils at various locations within MCBH housing areas. The presence of the pesticide residues in the soil is the result of past application of the chemicals on site rather than the result of a spill or other type of release.
[REDACTED]	[REDACTED]	[REDACTED]	(b) (5) [REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Notes: ECP – Environmental Condition of Property

9. PROPERTY CATEGORY DESIGNATION

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Pesticides/Herbicides: Buildings 460, 455 and PCA Warehouse 71 were constructed prior to the distribution and commercial application of chlordane in 1948. Chlordane was known to have been applied beneath and around building foundations at MCBH Kaneohe for termite protection until the ban on its use in 1988. The presence of the pesticide residues in the soil is the result of past application of the chemicals on site rather than the result of a spill or other type of release. Legal applications do not require remediation (Category 1); however, future construction that may disturb such soils may require environmental, as well as safety and health, controls.

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Table E-1: Site Contacts

Name	Title	Telephone	Email address	Date of Interview	Comments
Ms. Jackie Sanehira	NAVFAC PACIFIC Navy Technical Representative	(808) 472-1437	Jackie.sanehira@navy.mil	22 March 2006 and April 2006	Ms. Sanehira provided the Draft EA for the PPV Phase II housing.
Mr. Stephan Lee	NAVFAC PACIFIC Entomologist	(808) 472-1384	stephan.g.lee@navy.mil	29 March 2006	Mr. Lee was interviewed regarding the use of chlordane for ground termite protection at the family housing units.
Mr. Jason Mori	NAVFAC PACIFIC EV 1JM	(808) 472-1403	jason.mori@navy.mil	April 2006	Mr. Mori provided previous sampling results for chlordane at family housing construction areas.
Mr. John Padeken	MCBH Family Housing Department Building Maintenance Supervisor	(808) 257-1257 ext. 283	john.padeken@usmc.mil	22 March 2006 and 27 June 2006	Mr. Padeken was interviewed regarding the environmental conditions at Buildings 460 and 1505 and the Forest City Storage Areas. Mr. Padeken also coordinated the field visits to these sites. Mr. Padeken was also interviewed regarding the environmental conditions at Building 455 and coordinated the site visit for this building.
Ms. Paulette Ujimori	MCBH Environmental	(808) 257-6920 ext. 231	paulette.ujimori@usmc.mil	March 2006	Ms. Ujimori provided radon data for the housing and non housing areas.
Mr. Jeffrey Larson	MCBH Environmental	(808) 257-6920 ext. 234	jeffrey.larson@usmc.mil	March 2006 and June 2006	Mr. Larson provided information on USTs, storm water, and wastewater issues. Mr. Larson provided access and copies to the UST closure reports.
Dr. Dianne Drigot	MCBH Environmental Senior Natural Resources Management Specialist	(808) 257-6920 ext. 224	diane.drigot@usmc.mil	March and April 2006	Dr. Drigot provided information on the natural resources at MCBH Kaneohe Bay.
Mr. Randall Hu	MCBH Environmental Director	(808) 257-6920 ext. 232	randall.hu@usmc.mil	11 April 2006	Mr. Hu was interviewed regarding ACM, chlordane and waste oil issues.
Mr. Roy Murakami	MCBH Pest Control	(808) 257-1225		11 April 2006	Mr. Murakami was interviewed regarding current and past pesticide application practices.

Ryan Yamauchi

From: Lee, Stephan G CIV NAVFAC PAC [stephan.g.lee@navy.mil]
Sent: Wednesday, March 29, 2006 5:37 PM
To: rsyamauchi@hawaii.rr.com
Cc: Murakami CIV Roy T; Campora, Cory E CIV NAVFAC PAC; Sanehira, Jackie Y CIV NAVFAC PAC ; lance.bookless@usmc.mil; Mori, Jason S CIV NAVFAC PAC ; Davis, Bradford C CIV (NAVFAC PAC)
Subject: RE: PPV Housing

Ryan,

In regards to your question regarding confirmed records of chlordane applications in the MCB Hawaii housing areas, the answer may be limited. As I mentioned in our phone conversation today, chlordane was banned for all uses in 1988. I am not sure what the DoD did regarding chlordane use prior to 1988. The DoD may have declared a stop use of chlordane order prior to 1988 to be safe, since chlordane was banned for all uses except termite control in 1983 or maybe not. I just do not know. In addition, pest management records (as well as other records) were kept for only two years until relatively recently. In general, chlordane cannot be ruled out as a substance that was applied to the soil in the past, because it was so widely used before 1988 for subterranean termite control.

The pest control shop Supervisor, Roy Murakami, may be able to pull up some records, but you need to be specific regarding what locations you want to see. Roy's number is 257-1225.

Jason Mori, our engineer who handles hazmat/haz-waste issues, may be able to provide some information about MCB Hawaii housing and chlordane. His number is 472-1403.

Please feel free to contact me if you have questions.

Respectfully,
Stephan

Entomologist
Code EV2

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